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Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2010; month=5; day=5; hr=7; min=16; sec=37; ms=125;]

=====

Reviewer Comments:

<210> 19

<211> 53

<212> PRT

<213> Artificial sequence

<213> Artificial Sequence

<220>

<221> MISC_FEATURE

<222> (18)..(43)

<223> X is any amino acid

<400> 19

Thr Met Val Met Gly Arg Gly Ser His His His His His His Ala Arg
1 5 10 15

Ser Xaa
20 25 30

Xaa Asp Ala Asn Ala Pro
35 40 45

Lys Ala Ser Ala Ile
50

Please remove the duplicate "<213> Artificial Sequence", and provide a <220>--<223> section giving the source of the genetic material of "Artificial Sequence".

<210> 22
<211> 127
<212> DNA
<213> Artificial sequence

<220>
<221> MISC_FEATURE
<222> (28)..(105)
<223> S and N are A, T, G or C

<400> 22
agcggatgcc ttcggagcgt tagcgtcsnn snnsnnsnns nnsnnsnnsn nsnnsnnnsn
60

snnsnnsnns nnsnnsnnsn nsnnsnnsnn snnsnnsnns nnsnnnagatc tagcatgatg
120

atgatga
127

Please provide a <220>--<223> section explaining "<213> Artificial Sequence": please clearly indicate the source of the genetic material. Also, the <223> response regarding the "s's" and "n's" is erroneous: "s" can only represent c or g. Please re-word the <223> response as follows: s represents c or g, and n represents a, t, g or c.

<160> 414

Although the above <160> response is "414", 415 sequences are in the submitted file. See below for last sequence:

<210> 415
<211> 50
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic sequence, no source organism

<400> 415

Met Gly Arg Gly Ser His His His His His Ala Arg Ser Leu Ser
1 5 10 15

Arg Leu Ala Thr Val Leu Asp Glu Pro Asp Arg Ser Leu Gln Thr Arg
20 25 30

Thr Asn Arg Pro His Arg Met Ile Asp Ala Asn Ala Pro Lys Ala Ser
35 40 45

Ala Ile
50

Application No: 10579655 Version No: 3.0

Input Set:

Output Set:

Started: 2010-05-04 14:49:08.175
Finished: 2010-05-04 14:49:18.784
Elapsed: 0 hr(s) 0 min(s) 10 sec(s) 609 ms
Total Warnings: 380
Total Errors: 5
No. of SeqIDs Defined: 414
Actual SeqID Count: 415

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (1)
W 402	Undefined organism found in <213> in SEQ ID (2)
W 402	Undefined organism found in <213> in SEQ ID (3)
W 402	Undefined organism found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 402	Undefined organism found in <213> in SEQ ID (9)
W 402	Undefined organism found in <213> in SEQ ID (10)
W 402	Undefined organism found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 402	Undefined organism found in <213> in SEQ ID (13)
W 402	Undefined organism found in <213> in SEQ ID (14)
W 402	Undefined organism found in <213> in SEQ ID (15)
W 402	Undefined organism found in <213> in SEQ ID (16)
W 402	Undefined organism found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
E 249	Order Sequence Error <213> -> <213>; Expected Mandatory Tag: <400>

Input Set:

Output Set:

Started: 2010-05-04 14:49:08.175
Finished: 2010-05-04 14:49:18.784
Elapsed: 0 hr(s) 0 min(s) 10 sec(s) 609 ms
Total Warnings: 380
Total Errors: 5
No. of SeqIDs Defined: 414
Actual SeqID Count: 415

Error code	Error Description
	SEQID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (22)
W 402	Undefined organism found in <213> in SEQ ID (23)
W 402	Undefined organism found in <213> in SEQ ID (24)
W 402	Undefined organism found in <213> in SEQ ID (25)
W 402	Undefined organism found in <213> in SEQ ID (26)
W 402	Undefined organism found in <213> in SEQ ID (28)
W 402	Undefined organism found in <213> in SEQ ID (29)
W 402	Undefined organism found in <213> in SEQ ID (30) This error has occurred more than 20 times, will not be displayed
W 213	Artificial or Unknown found in <213> in SEQ ID (77)
W 213	Artificial or Unknown found in <213> in SEQ ID (78)
W 213	Artificial or Unknown found in <213> in SEQ ID (79)
W 213	Artificial or Unknown found in <213> in SEQ ID (80)
W 213	Artificial or Unknown found in <213> in SEQ ID (253)
W 213	Artificial or Unknown found in <213> in SEQ ID (254)
W 213	Artificial or Unknown found in <213> in SEQ ID (255)

Input Set:

Output Set:

Started: 2010-05-04 14:49:08.175
Finished: 2010-05-04 14:49:18.784
Elapsed: 0 hr(s) 0 min(s) 10 sec(s) 609 ms
Total Warnings: 380
Total Errors: 5
No. of SeqIDs Defined: 414
Actual SeqID Count: 415

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (256)
W 213	Artificial or Unknown found in <213> in SEQ ID (257)
W 213	Artificial or Unknown found in <213> in SEQ ID (258) This error has occurred more than 20 times, will not be displayed
E 252	Calc# of Seq. differs from actual; 414 seqIDs defined; count=415
E 250	Structural Validation Error; Sequence listing may not be indexable

SEQUENCE LISTING

<110> Sanofi Pasteur, Inc.

<120> METHODS FOR PURIFYING PERTUSSIS TOXIN AND PEPTIDES USEFUL
THEREFOR

<130> API-03-15

<140> 10/579,655

<141> 2006-05-18

<150> 60/523,881

<151> 2003-11-20

<150> PCT/US2004/038700

<151> 2004-11-18

<160> 414

<170> PatentIn version 3.5

<210> 1

<211> 7

<212> PRT

<213> Gymnea sylvestre

<400> 1

Asn Gly Ser Phe Ser Gly Phe

1 5

<210> 2

<211> 7

<212> PRT

<213> Gymnea sylvestre

<400> 2

Asn Gly Ser Phe Ser Gly Cys

1 5

<210> 3

<211> 7

<212> PRT

<213> Gymnea sylvestre

<400> 3

Asp Gly Ser Phe Ser Gly Phe

1 5

<210> 4

<211> 7

<212> PRT
<213> Gymnea sylvestre

<220>
<221> MISC_FEATURE
<222> (1)..(7)
<223> X is any amino acid

<400> 4

Xaa Gly Ser Phe Ser Gly Xaa
1 5

<210> 5
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic sequence, no source organism

<400> 5

Arg Ser Ser His Cys Arg His Arg Asn Cys His Thr Ile Thr Arg Gly
1 5 10 15

Asn Met Arg Ile Glu Thr Pro Asn Asn Ile Arg Lys Asp Ala
20 25 30

<210> 6
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic sequence, no source organism

<400> 6

Ser Thr Met Asn Thr Asn Arg Met Asp Ile Gln Arg Leu Met Thr Asn
1 5 10 15

His Val Lys Arg Asp Ser Ser Pro Gly Ser Ile Asp Ala
20 25

<210> 7
<211> 30
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic sequence, no source organism

<400> 7

Arg Ser Asn Val Ile Pro Leu Asn Glu Val Trp Tyr Asp Thr Gly Trp
1 5 10 15

Asp Arg Pro His Arg Ser Arg Leu Ser Ile Asp Asp Asp Ala
20 25 30

<210> 8

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic sequence, no source organism

<400> 8

Arg Ser Trp Arg Asp Thr Arg Lys Leu His Met Arg His Tyr Phe Pro
1 5 10 15

Leu Ala Ile Asp Ser Tyr Trp Asp His Thr Leu Arg Asp Ala
20 25 30

<210> 9

<211> 34

<212> PRT

<213> Gymnea sylvestre

<400> 9

Ser Gly Cys Val Lys Lys Asp Glu Leu Cys Ala Arg Trp Asp Leu Val
1 5 10 15

Cys Cys Glu Pro Leu Glu Cys Ile Tyr Thr Ser Glu Leu Tyr Ala Thr
20 25 30

Cys Gly

<210> 10

<211> 34

<212> PRT

<213> Gymnea sylvestre

<400> 10

Ser Gly Cys Val Lys Lys Asp Glu Leu Cys Glu Leu Ala Val Asp Glu

1 5 10 15

Cys Cys Glu Pro Leu Glu Cys Phe Gln Met Gly His Gly Phe Lys Arg
20 25 30

Cys Gly

<210> 11
<211> 35
<212> PRT
<213> Gymnea sylvestre

<400> 11

Ser Gly Cys Val Lys Lys Asp Glu Leu Cys Ser Gln Ser Val Pro Met
1 5 10 15

Cys Cys Glu Pro Leu Glu Cys Lys Trp Phe Asn Glu Asn Tyr Gly Ile
20 25 30

Cys Gly Ser
35

<210> 12
<211> 34
<212> PRT
<213> Gymnea sylvestre

<400> 12

Ser Gly Cys Val Lys Lys Asp Glu Leu Cys Glu Leu Ala Ile Asp Glu
1 5 10 15

Cys Cys Glu Pro Leu Glu Cys Thr Lys Gly Asp Leu Gly Phe Arg Lys
20 25 30

Cys Gly

<210> 13
<211> 35
<212> PRT
<213> Gymnea sylvestre

<400> 13

Gln Gln Cys Val Lys Lys Asp Glu Leu Cys Ile Pro Tyr Tyr Leu Asp

1 5 10 15

Cys Cys Glu Pro Leu Glu Cys Lys Lys Val Asn Trp Trp Asp His Lys
20 25 30

Cys Ile Gly
35

<210> 14
<211> 31
<212> PRT
<213> Gymnea sylvestre

<220>
<221> MISC_FEATURE
<222> (9)..(30)
<223> X is any amino acid

<400> 14

Cys Val Lys Lys Asp Glu Leu Cys Xaa Xaa Xaa Xaa Xaa Cys Cys
1 5 10 15

Glu Pro Leu Glu Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys
20 25 30

<210> 15
<211> 141
<212> DNA
<213> Gymnea sylvestre

<220>
<221> misc_feature
<222> (49)..(113)
<223> n is a, g, t or c

<400> 15
agtggctcaa gctcaggatc aggctgcgtc aagaaaagacg agctctgcnn snnsnnnsnns 60
nnsnnnstgct gtgagccctt cgagtgcnnns nnsnnnsnnsn nsnnsnnnsnn snnstgcggc 120
agcggcagtt ctgggtctag c 141

<210> 16
<211> 84
<212> DNA
<213> Gymnea sylvestre

<400> 16

taatacgact cactataggg acaattacta tttacaatta caatgcacca tcaccatcac 60

catagtggct caagctcagg atca 84

<210> 17

<211> 44

<212> DNA

<213> Gymnea sylvestre

<400> 17

ttttaatag cggatgtac taggctagac ccagaactgc cgct 44

<210> 18

<211> 10

<212> RNA

<213> Artificial Sequence

<220>

<223> Synthetic sequence, no source organism

<400> 18

uagcggaugc 10

<210> 19

<211> 53

<212> PRT

<213> Artificial sequence

<213> Artificial Sequence

<220>

<221> MISC_FEATURE

<222> (18)..(43)

<223> X is any amino acid

<400> 19

Thr Met Val Met Gly Arg Gly Ser His His His His His Ala Arg
1 5 10 15

Ser Xaa
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Ala Asn Ala Pro
35 40 45

Lys Ala Ser Ala Ile

50

<210> 20

<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic sequence, no source organism

<400> 20

His His His His His His
1 5

<210> 21
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic sequence, no source organism

<400> 21

Asp Ala Asn Ala Pro Lys
1 5

<210> 22
<211> 127
<212> DNA
<213> Artificial sequence

<220>
<221> MISC_FEATURE
<222> (28)..(105)
<223> S and N are A, T, G or C

<400> 22
agcggatgcc ttcggagcgt tagcgtsnn snnsnnnsnns nnsnnsnnsn nsnnnsnnnsn 60
snnsnnnsnns nnsnnsnnsn nsnnnsnnnsn snnsnnnsnns nnsnnnagatc tagcatgatg 120
atgatga 127

<210> 23
<211> 81
<212> DNA
<213> Gymnea sylvestre

<400> 23
taatacgact catagggaca attactattt acaattacaa tgggacgtgg ctcacatcat 60
catcatcatc atgctagatc t 81

<210> 24
<211> 32
<212> DNA
<213> Gymnea sylvestre

<400> 24
aattaaatag cggatgcctt cggagcgtta gc

32

<210> 25
<211> 18
<212> DNA
<213> Bacteriophage M13

<400> 25
tgtaaaacgta cggccagt

18

<210> 26
<211> 54
<212> PRT
<213> Gymnea sylvestre

<400> 26

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ala Gly Ser Val Gly His Cys Cys Glu
20 25 30

Pro Leu Glu Cys Leu Arg Arg Phe Leu Asn Leu Arg Trp Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 27
<211> 54
<212> PRT
<213> Gymnema sylvestre

<400> 27

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ile Val Met Arg Ala Pro Cys Cys Glu
20 25 30

Pro Leu Glu Cys Leu Arg Arg Tyr Met Leu Lys His Met Cys Gly Ser

35

40

45

Gly Ser Ser Gly Ser Ser
50

<210> 28
<211> 54
<212> PRT
<213> Gymnea sylvestre

<400> 28

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Lys Ala Phe Arg Tyr Ser Cys Cys Glu
20 25 30

Pro Leu Glu Cys Leu Arg Lys Trp Leu Lys Ala Arg Phe Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 29
<211> 54
<212> PRT
<213> Gymnea sylvestre

<400> 29

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Leu Arg Ser Ser Ile Asp Cys Cys Glu
20 25 30

Pro Leu Glu Cys Leu Tyr Lys Trp Met Gln Arg Arg Leu Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 30
<211> 54
<212> PRT
<213> Gymnea sylvestre

<400> 30

Met His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Trp Pro Arg Arg His Lys Cys Cys Glu
20 25 30

Pro Leu Glu Cys Leu Leu Glu Met Leu Glu Arg Lys Arg Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 31

<211> 53

<212> PRT

<213> Gymnea sylvestre

<400> 31

Met His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Met Ser Met Ala Cys Val Cys Cys Glu
20 25 30

Pro Leu Glu Cys Lys Tyr His Gly Tyr Phe Trp Leu Cys Gly Ser Gly
35 40 45

Ser Ser Gly Ser Ser
50

<210> 32

<211> 54

<212> PRT

<213> Gymnea sylvestre

<400> 32

Met His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ala Val Trp Phe Asp Val Cys Cys Glu
20 25 30

Pro Leu Glu Cys Thr Tyr Gln Ser Gly Tyr Tyr Trp Leu Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 33
<211> 54
<212> PRT
<213> Gymnea sylvestre

<400> 33

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Glu Pro Trp Tyr Trp Arg Cys Cys Glu
20 25 30

Pro Leu Glu Cys Val Tyr Thr Ser Gly Tyr Tyr Tyr Ser Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 34
<211> 54
<212> PRT
<213> Gymnea sylvestre

<400> 34

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ala Arg Trp Asp Leu Val Cys Cys Glu
20 25 30

Pro Leu Glu Cys Ile Tyr Thr Ser Glu Leu Tyr Ala Thr Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 35
<211> 54
<212> PRT

<213> Gymnea sylvestre

<400> 35

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Val Phe Tyr Phe Pro Asn Cys Cys Glu
20 25 30

Pro Leu Glu Cys Arg Trp Val Asn Asp Asn Tyr Gly Trp Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 36

<211> 53

<212> PRT

<213> Gymnea sylvestre

<400> 36

Met His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Met Ser Met Ala Cys Val Cys Cys Glu
20 25 30

Pro Leu Glu Cys Lys Tyr His Gly Tyr Phe Trp Leu Cys Gly Ser Gly
35 40 45

Ser Ser Gly Ser Ser
50

<210> 37

<211> 54

<212> PRT

<213> Gymnea sylvestre

<400> 37

Met His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Thr Thr Ala Ser Lys Ser Cys Cys Glu
20 25 30

Pro Leu Glu Cys Lys Trp Thr Asn Glu His Phe Gly Thr Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 38
<211> 54
<212> PRT
<213> Gymnea sylvestre

<400> 38

Met His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ser Gln Ser Val Pro Met Cys Cys Glu
20 25 30

Pro Leu Glu Cys Lys Trp Phe Asn Glu Asn Tyr Gly Ile Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 39
<211> 54
<212> PRT
<213> Gymnea sylvestre

<400> 39

Met His His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ala Arg Trp Asp Leu Val Cys Cys Glu
20 25 30

Pro Leu Glu Cys Ile Tyr Thr Ser Glu Leu Tyr Ala Thr Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 40
<211> 54

<212> PRT

<213> Gymnea sylvestre

<400> 40

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Ala Arg Trp Asp Leu Val Cys Cys Glu
20 25 30

Pro Leu Glu Cys Leu Gly His Gly Leu Gly Tyr Ala Tyr Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 41

<211> 53

<212> PRT

<213> Gymnea sylvestre

<400> 41

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Met Trp Ser Arg Glu Val Cys Cys Glu
20 25 30

Pro Leu Glu Cys Tyr Tyr Thr Gly Trp Tyr Trp Ala Cys Gly Ser Gly
35 40 45

Ser Ser Gly Ser Ser
50

<210> 42

<211> 54

<212> PRT

<213> Gymnea sylvestre

<400> 42

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Glu Leu Ala Val Asp Glu Cys Cys Glu
20 25 30

Pro Leu Glu Cys Phe Gln Met Gly His Gly Phe Lys Arg Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 43
<211> 54
<212> PRT
<213> Gymnea sylvestre

<400> 43

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Glu Leu Ala Val Asp Glu Cys Cys Glu
20 25 30

Pro Leu Glu Cys Thr Lys Gly Asp Leu Gly Phe Arg Lys Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 44
<211> 54
<212> PRT
<213> Gymnea sylvestre

<400> 44

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Glu Leu Ala Ile Asp Val Cys Cys Glu
20 25 30

Pro Leu Glu Cys Leu Gly His Gly Leu Gly Tyr Ala Tyr Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser
50

<210> 45

<211> 54
<212> PRT
<213> Gymnea sylvestre

<400> 45

Met His His His His Ser Gly Ser Ser Ser Gly Ser Gly Cys
1 5 10 15

Val Lys Lys Asp Glu Leu Cys Glu Leu Ala Ile Asp Val Cys Cys Glu
20 25 30

Pro Leu Glu Cys Leu Gly His Gly Leu Gly Tyr Ala Tyr Cys Gly Ser
35 40 45

Gly Ser Ser Gly Ser Ser